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Application serial no. 09/995,697
Office Action dated November 1, 2005
Response dated February 1, 2006

REMARKS/ARGUMENTS

Claim 31 has been cancelled and claim 32 has been amended to clarify that the substreams are stored within a fabric so as to be consistent to claim 1.

The Examiner rejected claims 1 to 39 under U.S.C. 102(e) as being anticipated by Vahalia et al. in U.S. Patent No. 5,933,603.

Applicant respectfully disagrees with the Examiner's assertions and requests the Examiner to reconsider and withdraw the objection in view of the following comments.

With respect Vahalia fails to teach the subject matter as claimed. Without limiting the generality of the forgoing, Vahalia does not teach or suggest a stream fabric as described in the subject application and recited in claim 1.

The Examiner has stated that Vahalia col. 23 lines 55-col. 24 lines 62 teaches: "a stream fabric, coupled to the producer and the potential consumers, that operates to receive the substreams from the producer, store each substream within a stream queue associated with each data stream and select one of said plurality of potential consumers and output at least a portion of the data within the stream queue to the selected consumer."

With respect, neither this passage, nor Vahalia generally teaches, suggests, or even mentions any type of fabric. Nor would it, as it addresses a different problem altogether.

The rejection relies on Figure 16, plus the description of Figure 17 in Col 23-24 of Vahalia. Quoting from the brief description of the drawings of Vahalia:

FIG. 16 is a schematic diagram showing "movie-on-demand" service to numerous network clients simultaneously viewing different portions of a movie;

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FIG. 17 is a flowchart of a routine for servicing requests from network clients for "movie-on-demand" service in accordance with the schematic diagram in FIG. 16;

Valhalia teaches a network for serving popular movies to a large number of viewers. Figure 16 of Vahalia illustrates, a plurality of stream server PCs 91, 92, 93 and 94 that serve portions of a movie to associated clients 1-4, 5-8, 9-12 and 13-16 across a network (e.g., the ATM network 53 in Figure 2). Each of these stream servers are computers (see Col 23) which store portions of a movie provided by the integrated cached disk array ICDA cache 41.

However claim 1 recites "a stream fabric coupled to the producer and the potential consumers, that operates to receive the substreams from the producer..." that is neither taught nor suggested by the Vahalia the reference. Figure 16 does not show any fabric. The cited sections do not describe any fabric. No portion of Valhalia even mentions a fabric. Nor would it, as Valhalia does not teach or suggest any single apparatus which switches streams of data between producers and consumers.

Applicant submits that Vahalia does not provide teachings which anticipate the invention defined by the subject claims at all. Consequently, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection under 102(e).

Applicant respectfully submits that dependant claims 2 through 25 are not anticipated by Vahalia as they depend from base claim 1 which Applicant submits recites elements neither taught nor suggested by the teachings of Vahalia.

Furthermore, each of these claims adds limitations which are not taught or suggested by Vahalia. Each claim is rejected without any basis other than to constantly recite the same portions. If the examiner does not accept the above arguments and maintains the rejection, we respectfully submit that the examiner has not satisfied the examiner's burden of demonstrating how the cited reference teaches each of the claimed limitations. Without limiting the generality of the foregoing we make a few observations with respect to some of the claim rejections.

The Examiner has rejected claim 2 on the basis of Vahalia. Claim 2 further defines the stream fabric as operating to select a consumer of the stream queue by

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reading a consumer attribute for the stream queue. Applicant respectfully submits that the invention described by Vahalia does not disclose a stream fabric as recited in the claims of the subject application and described in the related disclosure. Furthermore, not only does Vahalia fail to teach a stream fabric, it certainly does not teach a fabric which selects a consumer by reading a consumer attribute *for the stream queue*.

Without limiting the generality of the foregoing, the subject application teaches an example of stream fabric having a consumer attribute with reference to Figures 2 and 3 and the description found at page 11 lines 4 through 28. The stream fabric 70 can operate as depicted at step 300 of Figure 3 where the content processing element decides what to do to process this stream queue such as consume all of it, consume a portion of it, add data to the stream, delete data from the stream. The outcome of the decision made by the content processing element 80 is sent to the stream queue controller 72 of the stream fabric to indicate what decision was made.

With respect to claim 14, 15 and 16, the cited passages (or Vahalia generally) simply do not teach an Input/Output (I/O) element arranged to be coupled to a packet switched network; termination of a layer 4 protocol; or reordering the data respectively.

The Examiner rejected claim 26 on the basis that Vahalia teaches a content processing element by referring to column 23 lines 55 to column 24 lines 62 and Figure 10 through 16 of Vahalia. With respect, Applicant respectfully disagrees with the assertion made by the Examiner. The content processing element is described in general terms at page 11 lines 4 through 28 of the subject application. The content processing element determines whether to consume all or a portion of a data stream, delete data from the data stream, change data in the data stream, redirect the right to consume the stream to another potential consumer, request more data from the data stream are given by way of example of what the content processing element performs. Nothing in the teachings of Vahalia suggest a content element as described by the Applicant in the subject application and recited in claim 26. Moreover, as previously outlined by Applicant, Vahalia simply does not teach or even suggest a stream fabric as taught or described by Applicant in the subject application and recited in claims 1 and 26. Consequently, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of claim 26 on the basis of the teachings of Vahalia.

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Applicant submits that the dependent claims 27 through 29 of the subject application are patentably distinct from the teachings of Vahalia as they depend from base claim 26.

The Examiner has rejected claim 30 based on the same passages of Vahalia without further reasons. With respect, Vahalia does not teach anything of the sort. Vahalia simply does not teach the subject matter of Claim 30. Without limiting the generality of the foregoing, claim is reproduced below for convenience, with emphasis added to illustrate examples of portions of the claim which are not taught by Vahalia:

30 A *stream switch for directing*, within a packet switched network, a data stream, the stream switch comprising:

an interface, arranged to be coupled to the packet switched network, that operates *to receive and process a flow of data packets from the packet switched network, each of the data packets representing at least one segmented portion of the data stream*, and to output properly ordered substreams of the data stream;

a *stream fabric* that operates to receive the substreams from the interface and *store the substreams within a stream queue* associated with the data stream; and
a *content processing element* that operates to receive a copy of at least a portion of the data within the stream queue, process contents of the data received from the stream queue and *instruct the stream fabric to direct the data within the stream queue to a selected flow of packets* within the packet switched network, via the interface, in response to the processing of the contents of the data.

Vahalia fails to teach or suggest a stream fabric as previously submitted by Applicant. Moreover, Applicant respectfully submits that Vahalia fails to teach or suggest a stream switch, a content processing element, or an interface as recited in claim 30 of the instant application. For these reasons, Applicant respectfully requests the Examiner to reconsider withdrawal of the rejection of claim 30 on the basis of Vahalia.

Claim 31 has been cancelled.

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Claim 32 has been amended to clarify that each substreams are stored within a fabric so as to be consistent to claim 1. Accordingly, as previously argued, Vahalia does not teach or suggest the use of a fabric, and therefore claim 32 is patentable for this reason, as argued above with reference to claim 1.

Claim 33 is rejected based on the assertion that, column 23 lines 55 through column 24 lines 62 and Figures 10 through 16 of Vahalia teaches the properly ordered substreams of a data stream are produced by receiving a flow of data packets, each of the data packets representing at least one segmented portion of the data stream and terminating the layer 4 protocol within the received data packets. With respect, Applicant respectfully disagrees with the Examiner's characterization of the teachings of Vahalia. The teachings of Vahalia which relate to replication of a source to a number of streams for delivery to a client deal with the issues and technical parameters that are completely unrelated to network node processing and IP switches and IP routers that operate with a layer 4 protocol. Thus Applicant submits that the Vahalia disclosure does not teach or suggest producing properly ordered substreams of a data stream including terminating the layer 4 protocol within the received data packets as recited in claim 33. Therefore, Applicant respectfully requests the Examiner to reconsider and withdraw the objection to claim 33 for the foregoing reasons. Claims 34 through 38 are dependant from claim 32 or claim 33 and are patentable over the Vahalia prior reference for reasons given.

Applicant submits that claim 39 is distinct from the teachings of Vahalia in that claim 39 recites "processing contents within at least a portion of the data within the stream queue to determine one of a plurality of potential consumers to select as a consumer of the stream queue". The Examiner in making the rejection refers to column 23 lines 55 through column 24 lines 62 and Figures 10 through 16 of Vahalia. Applicant respectfully disagrees with the Examiner's characterization of the teachings of Vahalia. Vahalia does NOT provide teachings relating to processing the contents of the data stream to determine one of a plurality of potential consumers to select as a consumer of the stream queue. Vahalia is concerned with parceling a data stream to a stream server as shown in Figures 9, 13 and 16. This is completely unlike the content processing that Applicant teaches and claims in the subject application. Consequently, Applicant respectfully requests the Examiner to withdraw the rejection of claim 39.

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Accordingly withdrawal of the rejections and favorable consideration is respectfully requested.

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

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